Noxious Weed Management and Rehabilitation Plan

SFPP El Paso to Phoenix Expansion Project

Prepared for

Bureau of Land Management SFPP, L.P.

June 2006



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Definitions

Exotic Plants Species not indigenous to a given area prior to European settlement.

Native Plants Species that are indigenous to a given area prior to European

settlement.

Noxious Weeds Species identified by public law as exerting substantial negative

environmental or economic impact. Noxious weeds are a subset of exotic plants. The term "noxious weeds" is a legal classification, not an ecological term. Noxious weed lists for the states of Texas, New Mexico and Arizona are provided in a table at the end of this

document.

Statement of Purpose

SFPP, L.P. is committed to preventing the spread of noxious weed along lands disturbed by its pipe line installation activities. The Application solicited comments from Bureau of Land Management (BLM) State Weed Coordinators along the proposed route. Comments received were incorporated into this Management and Rehabilitation Plan, which lists measures that will be implemented by SFPP to control noxious weeds the proposed project ROW.

Background and Existing Environment

Exotic plants are often early-successional, pioneer species that are very successful at colonizing disturbed area. They typically produce large quantities of easily-dispersible seeds that establish quickly and grow to out-compete natives for water, nutrients, and other resources. They may also spread vegetatively following disturbance. Some exotic plants, in particular many noxious weeds, can become established without soil disturbance. Once introduced into an area, these species can invade intact vegetative cover and displace native plants.

Disturbed areas such as road ROWs often harbor exotic plant species, including noxious weeds. Since the proposed pipeline will occur within previously disturbed ROW, exotic plants including noxious weeds are already present along portions of the route.

Determination

The proposed action will take place within some areas of known noxious weed populations, and will cause additional soil disturbance. Therefore, it has potential to contribute to the spread of noxious weeds in some areas in the absence of appropriate prevention measures. The risk factor for noxious weed spread by the proposed project has been determined to range from low to moderate.

The risk for noxious weed spread is low in areas along the route in which noxious weeds are present adjacent to, but not within, the proposed alignment. The risk for noxious weed spread is moderate in areas along the route in which noxious weeds are located immediately adjacent to or within the proposed alignment.

Prevention Measures

The construction contractor will take the following measures to minimize the risk of noxious weed spread.

4.1 Communication with Agencies

- The contractor will contact relevant BLM State Weed Coordinators prior to starting work in each area to discuss specific noxious weed concerns and requirements. Contact names and phone numbers are included in Table 1 at the end of this document.
- The contractor will wash vehicles (see below) after crossing through areas of known weed infestations as determined by agency personnel.
- The contractor will use approved seed mixes for reseeding (see below) as determined by agency and county personnel where reseeding is required.

4.2 Vehicle Washing

- The contractor will wash construction equipment prior to entering each state if coming from out of state, with the exception of moving equipment across the New Mexico/Arizona state line within the Segment 2 ROW.
- The contractor will wash vehicles periodically during construction. Frequency of washing will depend on frequency of weed populations encountered as determined by land management agency personnel. At a minimum, vehicles and construction equipment will be washed before entering the project site for the first time.
- All washing of construction equipment will take place within an approved washing station.

4.3 Construction Techniques

- Ground disturbance will be minimized by the use of the least intrusive construction technique practicable for a given location.
- Off-ROW travel will not be allowed
- The contractor will avoid transporting contaminated materials, such as soils, gravel, mulch, hay/straw and sand.
- Hay and straw used for mulching will be certified by the pertinent state as free as of any noxious weeds.

4.4 Revegetation

- The contractor will reseed disturbed areas as directed by the land management agency with jurisdiction.
- The contractor will use native seed mixes tested free of weed seed for revegetation. No species on the "State Noxious Weed List" will be included in revegetation seed mixes.
- The contractor will confer with the jurisdictional land management agency personnel to
 determine appropriate seed mixes where reseeding is required. The contractor will use
 mixes or species recommended by agency personnel within each weed district where
 available. Native species will be used except in cases where non-persistent exotic species
 are preferable in order to establish vegetative cover quickly.

Monitoring and Control

The environmental compliance monitors designated for this project will be qualified to identify the presence or absence of noxious weeds along the proposed route, and existing population of weed infestations will be identified prior to construction. The weed monitor will keep ahead of construction crews to identify areas of concern. Areas where noxious weeds are prevalent will be flagged so that they are easily identifiable.

TABLE 1
State Noxious Weed Contacts

State	Contact Name	Contact Phone
Texas	Awinash Bhatkar	(512) 463-5025
New Mexico	Bernie Chavez	(505) 438-7668
Arizona	Gina Ramos	(602) 417-9246

TABLE 2Texas Noxious Weeds (Category Definitions: S1=Prohibited noxious weed seed: highly destructive and difficult to control by ordinary good cultural practice. S2=Restricted noxious weed seed: objectionable in field, lawns, and gardens, but can be controlled by good cultural practices.)

Common Name	Latin Name	Category
Goatgrass	Aegilops sp.	S2
Corncockle	Agrostemma githago	S2
wild onion	Allium spp.	S2
wild oat	Avena fatua	S2
feral oat	Avena sp.	S2
wild mustards	Brassica spp.	S2
hairy chess	Bromus commutatus	S2
cheat	Bromus secalinus	S2
hedge bindweed	Calystegia sepium	S1
balloonvine	Cardiospermum halicacabum	S1
Russian knapweed	Centaurea repens	S2
Canada thistle	Cirsium arvense	S2
blessed thistle	Cnicus benedictus	S2

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Common Name	Latin Name	Category
field bindweed	Convolvulus arvensis	S1
dodder (other than native spp.)	Cuscuta spp.	S2
bermudagrass	Cynodon dactylon	S2
yellow nutsedge	Cyperus esculentus	S1
purple nutsedge	Cyperus rotundus	S1
nutsedge	Cyperus spp	S1
wild carrot	Daucus carota	S2
quackgrass	Elytrigia repens	S2
Texas blueweed	Helianthus ciliaris	S2
morningglory	Ipomoea spp.	S2
Persian darnel	Lolium persicum	S2
poison ryegrass	Lolium temulentum	S2
serrated tussock	Nassella trichotoma	S1
red rice	Oryza sativa	S2
passion flower/maypop	Passiflora incarnata	S2
bracted plantain	Plantago aristata	S2
buckhorn plantain	Plantago lanceolata	S2
annual bluegrass	Poa annua	S2
wild radish	Raphanus raphanistrum	S2
castorbean	Ricinus communis	S1
itchgrass	Rottboellia cochinchinensis	S1
giant foxtail	Setaria faberi	S2
blessed milkthistle	Silybum marianum	S2
Carolina horsenettle	Solanum carolinense	S2
silverleaf nightshade	Solanum elaeagnifolium	S2
tropical soda apple	Solanum viarum	S1
Johnsongrass	Sorghum halepense	S2
puncturevine	Tribulus terrestris	S2
pocklebur	Xanthium spp.	S1

The New Mexico Department of Agriculture has selected the following plant species to be targeted as noxious weeds for control or eradication pursuant to the Noxious Weed Management Act of 1998.

New Mexico s noxious weed list is classified into three divisions: Class A, Class B, and Class C weeds, all of which are non-native to New Mexico. Class A weeds are species that currently are not present in New Mexico or have limited distribution; preventing new infestations of these species and eradicating existing infestations is the highest priority.

Class B weeds are species that are limited to portions of the state. In areas that are not infested, these species should be treated as class A weeds. In areas with severe infestations, management plans should be designed to contain the infestation and stop any further spread.

Class C weeds are species that are wide-spread in the state. Management decisions for these species should be determined at the local level based on feasibility of control and level of infestation.

This list does not include every plant species with a potential to negatively impact the state's environment and economy. Vegetation managers are also encouraged to recognize plant species listed on the federal noxious weed list or other western states noxious weed lists as potentially having negative impacts and to manage them accordingly.

TABLE 3 New Mexico Noxious Weeds

Common Name	Latin Name	Class
Alfombrilla	Drymaria arenarioides	А
Black henbane	Hyoscyamus niger	Α
Camelthorn	Alhagi pseudalhagi	Α
Canada thistle	Cirsium arvense	Α
Dalmation toadflax	Linaria genisitifolia spp. dalmatica	Α
Diffuse knapweed	Centaurea diffusa	Α
Dyer's wood	Isatis tinctoria	Α
Eurasian watermilfoil	Myriophyllum spicatum	Α
Hoary cress	Cardaria draba	Α
Hydrilla	Hydrilla verticillata	Α
Leafy spurge	Euphorbia esula	Α
Onionweed	Asphodelus fistulosus	Α
Perennial pepperweed	Lepidium latifolium	Α
Purple loosestrife	Lythrum salicaria	Α
Purple starthistle	Centaurea calcitrapa	Α
Scotch thistle	Onopordum acanthium	Α
Spotted knapweed	Centaurea maculosa	Α
Yellow starthistle	Centaurea solstitialis	Α
Yellow toadflax	Linaria vulgaris	Α
African rue	Peganum harmala	В
Bull thistle	Cirsium vulgare	В
Halogeton	Halogeton glomeratus	В
Malta starthistle	Centaurea melitensis	В
Musk thistle	Carduus nutans	В
Russian knapweed	Acroptilon repens	В
Poison hemlock	Conium maculatum L.	В
Teasel	Dipsacus fullonum	В
Field bindweed	Convolvulus arvensis L.	С
Jointed goatgrass	Aegilops cylindrical	С
Russian olive	Elaeagnus angustifolia L.	С
Saltcedar	Tamarix sp.	С
Siberian elm	Ulmus pumila	С

TABLE 4
Arizona Noxious Weeds (Category Definitions: 1=Regulated noxious weed which is well established and generally distributed in Arizona. 2=Restricted noxious weed which occurs in isolated infestations or very low populations. 3=Prohibited noxious weed which does not occur in Arizona)

Common Name	Latin Name	Category
puna grass	Achnatherum brachychaetum	3
jointed goatgrass	Aegilops cylindrica	2
camelthorn	Alhagi maurorum	2
alligator weed	Alternanthera philoxeroides	3
lens podded hoary cress	Cardaria chalepensis	3
hoary cress	Cardaria draba	2
hairy whitetop	Cardaria pubescens	3
Cardaria complex (combined)	Cardaria spp.	2 or 3
plumeless thistle	Carduus acanthoides	3
field sandbur	Cenchrus carolinianus	1
southern sandbur	Cenchrus echinatus	1
purple starthistle	Centaurea calcitrapa	3
diffuse knapweed	Centaurea diffusa	2
Iberian starthistle	Centaurea iberica	3
spotted knapweed	Centaurea maculosa	2
Russian knapweed	Centaurea repens	2
yellow starthistle	Centanurea solstitialis	2
Sicilian starthistle	Centaurea sulphurea	3
squarrose knapweed	Centaurea triumfettii	3
rush skeletonweed	Chondrilla juncea	3
Canada thistle	Cirsium arvense	3
field bindweed	Convolvulus arvensis	1
creeping wartcress	Coronopus squamatus	3
dudaim melon	Cucumis melo	3
other than native spp (dodder)	Cuscuta spp.	2
sandy drymaria	Drymaria arenarioides	3
peacock hyacinth	Eichhorina azurea	3
floating waterhyacinth	Eichhornia crassipes	2
quackgrass	Elytrigia repens	2

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Common Name	Latin Name	Category
leafy spurge	Euphorbia esula	3
halogeton	Halogeton glomeratus	2
Texas blueweed	Helianthus ciliaris	2
waterthyme	Hydrilla verticillata	3
morningglory	Ipomoea spp.	3
three-lobed morning glory	Ipomoea triloba	2
dyer's woad	Isatis tinctoria	3
Dalmatian toadflax	Linaria dalmatica	2
purple loosestrife	Lythrum salicaria	3
burclover	Medicago polymorpha	1
serrated tussock	Nassella trichotoma	3
Scotch thistle	Onopordum acanthium	2
branched broomrape	Orobanche ramosa	3
torpedo grass	Panicum repens	3
African rue	Peganum harmala	3
kikuyugrass	Pennisetum clandestinum	3
common purslane	Portulaca oleracea	1
Austrian fieldcress	Rorippa austriaca	3
tansy ragwort	Senecio jacobaea	3
Carolina horsenettle	Solanum carolinense	3
perennial sowthistle	Sonchus arvensis	3
witchweed	Striga spp.	3
water chestnut	Trapa natans	3
puncturevine	Tribulus terrestris	1
Lehmann lovegrass	Eragrostis lehmanniana	1(Ft. Bowie)